

REMARKS

Reexamination and reconsideration of claims 1-20 are respectfully requested. Additionally, Applicants acknowledge and appreciate the withdrawal of the following 35 U.S.C. sec. 112 rejections in the previous Office Action: the rejection of claims 1-20 under 35 U.S.C. 112, first paragraph; the rejection of claims 5-9 under 35 U.S.C. 112, first paragraph; the rejection of claims 5-9 under 35 U.S.C. 112, second paragraph; the rejection of claims 1-12 under 35 U.S.C. 112, second paragraph; the rejection of claims 13-20 under U.S.C. 112, second paragraph; and the rejection of claims 1-20 under U.S.C. 112, second paragraph.

Claims 1-12 were rejected under 35 U.S.C. sec. 112, second paragraph, for being indefinite. Claim 1 has been amended to remove any indefiniteness that may have existed and clearly recite the claimed invention. An exemplary description of the invention recited in claim 1 is discussed in the present application beginning on page 8, 11. 19 and is reproduced below.

As shown by the cross section in Fig. 2, which is not to scale, the sheath 9 of the communication cable 1 is constructed in layered fashion. The inner layer 10...
[****] ...of the sheath 9 [is] toward the core...[****].

The outer sheath layer 11 serving as the marking surface also has a soot admixed with it as a dye...[****]. Both sheath layers 10/11 each dyed black, are applied by extrusion to the cable core and welded to one another.

Thus, one of ordinary skill reading amended claim 1 in light of the specification would understand the claim. For at least these reasons, withdrawal of the sec. 112 rejection, second paragraph, of claims 1-12 is respectfully requested.

Claims 13-20 were rejected under 35 U.S.C. sec. 112, second paragraph, for being indefinite. Claim 13 has been amended to remove any indefiniteness that may have existed and clearly recite the claimed invention. One of ordinary skill in the art

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would clearly understand amended claim 13 upon reading the specification. More specifically, the specification states "...a dimension of the exterior layer (thickness of the exterior layer and/or the proportion of the dye [therein]) is selected such the exterior layer absorbs the radiation used for marking completely..." See p. 6, ll. 8-11 of the present application. In other words, the thickness of the exterior layer and/or the proportion of dye therein can be selected so that the exterior layer absorbs the radiation. For at least these reasons, withdrawal of the sec. 112 rejection, second paragraph, of claims 13-20 is respectfully requested.

Claims 1, 2, 3, 10, 11, and 12 were rejected under 35 U.S.C. sec. 103(a) applying U.S. Pat. No. 4,865,198 (the '198 patent) without a teaching reference. For a patent to be applicable under sec. 103(a), the teaching must, *inter alia*, expressly or inherently, teach, disclose, or otherwise suggest each and every feature of the claimed invention. Additionally, motivation and suggestion to modify the patent must be present.

With respect to claims 1, 2, 3, 10, 11, and 12 the Office Action has failed to make a *prima facie* case of obviousness because the '198 patent does not teach, disclose, or otherwise suggest each and every feature of claim 1. Additionally, the amendment of claim 1, or any other claim, is not an admission that the art of record teaches, discloses, or otherwise suggests the features of the claim.

First, claim 1 is generally directed to a sheathing of a communication cable having two layers. On the other hand, the '198 patent is directed to tamper-evident packaging that transfers a pattern between a package surface and the underside of a clear overwrap film. See the Title and Abstract of the '198 patent. In other words, the method of the '198 patent produces an imprinted image on the interior surface of an overwrap film by vaporizing ink from an underlying substrate, i.e., the package

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being covered by the overwrap film. See Col. 1, ll. 25-35 of the '198 patent.

Besides not being a sheathing of a communication cable, there is absolutely no credible objective evidence of record that the overwrap layer 2 of the '198 patent has a first layer of a first material and a second layer of a second material with respective proportions of dye admixed with respective layers as recited in claim 1. See the '198 patent and Figs. 1-4. Moreover, the '198 patent teaches an ink transfer mechanism that transfers ink from the package to the inside surface of the overwrap film. As such, the chemical nature of the film is not critical so long as it has an appropriate ink affinity characteristics so that it adheres to the inside surface of the overwrap film. See Col. 2, ll. 18-25 of the '198 patent.

Whereas, claim 1 recites that the second layer of the sheathing forms an exterior surface marked by irradiation with photons that melt the irradiated region, thereby forming a foamed CO₂ region that scatters incident light. Stated another way, the sheathing of the communication cable is marked on the exterior surface thereof and the respective proportion of dyes admixed with the layers affects marking characteristics. For these reasons alone, withdrawal of the sec. 103(a) rejection of claims 1, 2, 3, 10, 11, and 12 is warranted.

Additionally, the Office Action admits, and Applicants agree, that the '198 patent fails to teach a dye provided in both the first and second layers. Specifically, at p. 6 the Office Action states the following:

Butler [the '198 patent] fails to specifically teach a dye provided in both the first and second layers. It would have been obvious to one having ordinary skill in the art to have provided dye in both layers, or either layer by itself to have provided the overwrapping package material with a preferred design choice.

Merely stating that a feature of the claimed invention is a preferred design choice, without more, is an improper rejection and does not make out a *prima facie* case of obviousness supported by the objective evidence of record. Moreover, stating that features of a claimed invention are a preferred design choice, without more, does not afford the Applicant a fair opportunity to address the rejection. For at least these reasons, a *prima facie* case of obviousness is lacking.

Furthermore, claim 1 recites, *inter alia*, a sheathing of a communication cable including a first layer of a first material containing a first proportion of a dye admixed with the first material, and a second layer adjacent to the first layer forming an exterior surface having a marking face marked by irradiation with photons, the second layer being formed of a second material that contains a second proportion of dye smaller than the first proportion of dye which is admixed with the second material.

As pointed out in the Office Action, the '198 patent expressly teaches that the chemical nature of the overwrap film is not critical so long as key features are met. See Col. 2, 11. 18-39 of the '198 patent. Since the chemical nature of the overwrap film is not critical outside these key features, the skilled artisan would not be concerned or motivated to admix dyes with the overwrap layer 2 for marking on the exterior surface. Rather, the skilled artisan would have been concerned with key features expressly stated as the protective nature, ink affinity characteristics, and essential transparency to the energy source of the overwrap layer 2. Id.

Specifically, the skilled artisan would have understood that admixing dyes, i.e., carbon materials such as soot and graphite in the material of overwrap layer 2 would decrease the transparency of overwrap layer 2 to the energy source. In other words, making the purported modification would degrade one of the key features. Thus, the skilled artisan would not have been

motivated, nor taken a suggestion, to reduce the transparency of the overwrap film 2 of the '198 patent to the energy source as suggested in the Office Action by admixing dyes such as carbon materials therewith. Moreover, if the overwrap layer 2 included too much carbon material it would render the energy source inoperable for vaporizing the ink under the overwrap layer 2, i.e., the energy of the source would be absorbed before reaching the ink under the overwrap layer, thereby preventing the transfer of the ink pattern.

Still further, the skilled artisan would have understood that damage to the overwrap layer of the '198 patent would render the tamper resistance packaging inoperable for its intended purpose. Whereas, the claimed invention melts and deforms the irradiated region in order to mark the same. Simply stated, the skilled artisan would view marking as recited in the present invention as destroying the tamper-resistant packaging, thereby rendering the tamper-resistant packaging inoperable for its intended purpose of indicating tampering to the consumer. Therefore, the '198 patent teaches away from the present invention. For at least the reasons stated herein and previously, withdrawal of the sec. 103(a) rejection of claims 1, 2, 3, 10, 11, and 12 is respectfully requested.

Claims 4-9 and 13-20 were rejected under 35 U.S.C. sec. 103(a) applying the '198 patent in view of U.S. Pat. No. 6,031,457 (the '457 patent). The '457 patent teaches a thin film coating (TFC) having a predetermined resistance for authentication purposes, thereby thwarting counterfeiters. See the Abstract and Summary of the Invention of the '457 patent. Additionally, the substrate or the TFC may be printed on. See Col. 5, ll. 30-35 of the '457 patent. For at least the reasons stated above with respect to claim 1, withdrawal of the sec. 103(a) rejection of claims 4-9 is warranted and is respectfully requested.

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The amendment of claim 13, or any other claim, is not an admission that the art of record teaches, discloses, or otherwise suggests the features of the claim. First, as discussed above the '198 patent does not teach, disclose, or otherwise suggest admixing a soot or graphite with an exterior layer, nor would the skilled artisan be motivated or taken a suggestion to do so. Furthermore, the '457 patent merely teaches printing on a substrate or TFC, it does not teach, disclose, or otherwise suggest admixing a soot or graphite with an exterior layer of a sheath.

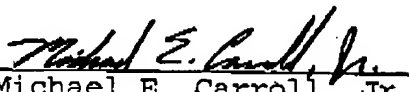
As an independent basis, if the '198 patent were modified so that the overwrap layer 2 was not essentially transparent to the energy source used to vaporizing the ink on the substrate or package underneath the overwrap layer 2 it would be rendered inoperable for its intended purpose. On the other hand, claim 13 recites, inter alia, a plurality of predetermined characteristics so that the exterior layer of sheathing absorbs the radiation used for marking completely. In other words, if the purported modification of the '198 patent were made the ink on the underlying substrate or package would never be exposed to the radiation of the energy source and the ink transfer would not take place. See the Summary of the Invention for the '198 patent. The skilled artisan would not make a modification that would render the '198 patent inoperable for its intended purpose. Thus, a *prima facie* case of obviousness is lacking. The withdrawal of the sec. 103(a) rejection of claims 13-20 is warranted and is respectfully requested.

No fees are believed due in connection with this Reply. If any fees are due, please charge any fees, or credit any overpayment, to Deposit Account Number 19-2167.

Allowance of all pending claims is believed to be warranted and is respectfully requested.

The Examiner is welcomed to telephone the undersigned to discuss the merits of this patent application.

Respectfully submitted,


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